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GB 1452927 A GB 1398434 A GB 1315139 A
GB 1141281 A GB 0950979 A GB 0868315 A
GB 0739428 A

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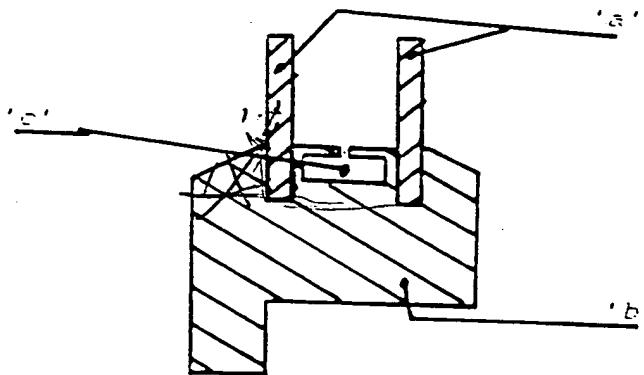
(54) Double glazed units

(57) Double glazed units are used to improve the insulation and acoustic properties of windows, doors and glazed panels used in domestic, commercial and leisure applications.

The glazing sheets a (either glass or plastic) are located and secured directly into the frame b. Thereby eliminating the necessity for separate sealed units as is current practice.

The sheets are located within an outer frame and sealed to produce a rigid air tight double glazed unit.

These double glazed units are fitted into conventional timber, metal or plastic outer frames using traditional hinged and/or rigid securing methods.

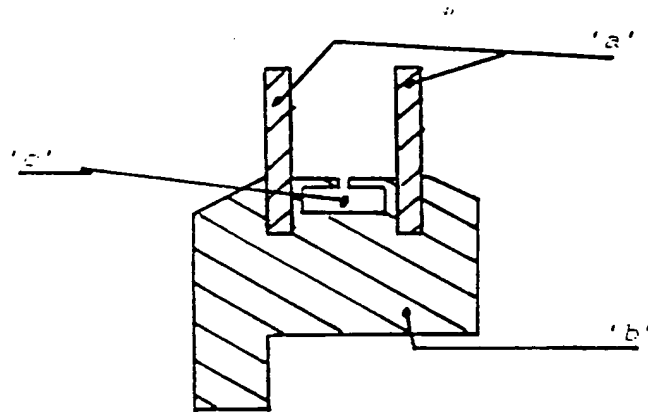


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FIGURE 1.



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DOUBLE GLAZED UNITS

This invention relates to double glazed units.

Double glazed units are currently manufactured and supplied as 'sealed units' for installation within the framework of windows, doors and panels for use in domestic, commercial and leisure applications.

Present technology and common practice is that two sheets of glass are assembled onto a spacer bar forming a sandwich. This assembly is then sealed around the outer edge to form a 'sealed unit'. Sealed units are then fitted within frames of timber, metal or plastic.

It is proposed that two or more sheets of glass be fitted directly within the frame without the necessity of constructing separate sealed units. These frames will be timber, metal, plastic or a combination of each. The glass will be sealed into the frame using either liquid or solid sealing compounds or materials. The frame will be secured at the corners using either fusion, mechanical or adhesion joints or a combination of each.

Figure 1, shows a cross section of a typical frame with the glass in position.

Referring to figure 1,

Item a, depicts the glass forming the double glazing.

Item b, depicts the frame, this framework can be timber, metal, plastic or a combination of each. On metal framed windows the area between the glass can be a non conducting material to act as both a spacer and thermal barrier.

Item c, (optional) depicts a cavity open to the gap between the glass and containing silica gel or a similar moisture absorbent material.

CLAIMS

1. A glazing system where the translucent sheets (normally glass) forming two or more spaced sheets are glazed directly into the outer frame.
2. The glazing system can be incorporated into a timber frame.
3. The glazing system can be incorporated into a metal frame.
4. The glazing system can be incorporated into a plastic frame.
5. The glazing system can be incorporated into a composite timber, metal and/or plastic frame.
6. The double glazed units as claimed in claim 1, is suitable for primary new build installations.
7. The double glazed units as claimed in claim 1, is suitable for the replacement of existing systems.
8. The double glazed units as claimed in claim 1, is suitable for use in windows, doors and panels used in domestic, commercial and leisure applications.
9. The double glazed units as claimed in claim 1, allow the panels to be fitted directly into the frame without the necessity of constructing a separate sealed unit as is current practice.
10. The sheets can be sealed into the frame using either liquid or solid sealing compounds or materials.
11. The area between the panels can be open to silica gel or a similar moisture absorbant material.
12. The frame is secured at the corners using fusion, mechanical or adhesion joints or a combination of each.

Patents Act 1977
Examiner's report to the Comptroller under
Section 17 (The Search Report)

Application number
9107188.6

Relevant Technical fields	Search Examiner
(i) UK Cl (Edition K) <u>E1J</u> (JCX); <u>E1R</u>	Bruce Westerman
(ii) Int Cl (Edition 5) <u>E06B</u> 3/24	
Databases (see over)	Date of Search
(i) UK Patent Office	28 May 1991
(ii)	

Documents considered relevant following a search in respect of claims 1-12 (but see letter enclosed)

Category (see over)	Identity of document and relevant passages	Relevant to claim(s)
X	GB 1452927 (LONDON BOROUGH OF HOUSLOW) - whole document	1,3, 6-10
X	GB 1398434 (GLAVERBEL) - see particularly page 1 lines 15-57	1,3-12
X	GB 1315139 (HANSSON) - whole document	1,3, 6-9
X	GB 1141281 (RUSSELL) - whole document	1-3, 5-10
X	GB 950979 (AUSTER) - see particularly page 1 lines 54-59	1,3, 5-10
X	GB 868315 (SCHAD) - whole document	1,2,4, 6-12
X	GB 739428 (PERSSON) - whole document	1-3, 5-10,12

Category	Identity of document and relevant passages	Relevant to claim(s)

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